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The Role of Information in Enabling Community Response to Mining Threats in Palmares II

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The role of information in enabling community response to mining threats in Palmares II

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Abstract

The case of Palmares II is examined to understand the role that knowledge (or misinformation/lack thereof) of specific geologic interests and rights of surface communities plays in enabling those communities to respond to the possibility of mining on their land. Palmares II is an MST settlement located near the Carajás mining complex in southern Pará. Currently, a number of companies are authorized or requesting permission to conduct research for mineral ores such as gold, copper, manganese, diamond, and nickel within the borders of the settlement; it is therefore potentially possible that this community will face mining interest on their land in coming years. Knowledge of the laws regulating mining was gathered from publicly available sources and discussions with lawyers and employees of the Ministério Público of Pará state. Knowledge of current mineral processes (including requests for permission to conduct research) in Palmares was gathered from the DNPM’s online SIGMINE database. To assess the accuracy and completeness of information present in the community, information from these two sources was compared to the analogous knowledge and beliefs of the community leadership, as collected through a series of unstructured interviews in the settlement with members of various community organizations and the newly-formed Movimento dos Atingidos pelo Mineração (MAM).

Some major points of mining law were not seemingly known by the leadership of Palmares, including the specifics of what companies were authorized to conduct research, and importantly, required compensation to landowners. The leadership is aware of the incompleteness of its own knowledge, however, and this is motivating action on the part of MAM.

Information is distributed unequally within the community- those in leadership positions have a much clearer picture of their rights than rural landowners. However, mining companies such as Vale are directing much of their interactions with the communities through these individuals in the field, exploiting the lack of knowledge.

Thus, the presence of partial information, and the perception of that information as being incomplete, is spurring community response. At the same time, however, the gaps in this knowledge are being used by the companies in the region to advance their own agenda. MAM is currently focusing on becoming a national political voice, but to succeed it must focus on becoming relevant to this rural community as well.


Resume

O caso de Palmares II estava tratado para entender como conhecimento (e também falta de conhecimento) das intessas específicas geológicas na terra de uma comunidade, e dos direitos dos superficeiros, afeta a abilidade da comunidade preparar contra a possibilidade de obras de mineração. Palmares II é um assentamento do Movimento Sem Terra, perto da Mina Carajás no Sul do Pará. Atualmente, companhias várias ou estão requerindo, ou já têm, autorização para fazer pesquisa para minerais como ouro, cobre, manganês, diamante industrial, e nickel entre as fronteiras de Palmares II; então é possível que algumas companhias requerirão autorização para extrair minerais nestes locações nos anos que vêm.

Conhecimento da processa de legalização de mineração e as obrigações das companhias pelos povos afetados estava colocado de fontes públicos e por conversas com advogados e técnicos do Ministério Público Estadual do Pará. Conhecimento dos processas atual de mineração no Palmares II (incluindo requerimentos e autorizações de pesquisa) estava achado pelo sistema SIGMINE do DNPM no Internet. Para avaliar a precisão e plenitude do conhecimento na comunidade, a informações destes dois fontes estava comparado ao conhecimento e crenças da liderança da comunidade, que foi colocado por uma série de intrevistas na Palmares com membros das várias organizações sociais e a novamente fundado Movimento dos Atingidos pelo Mineração (MAM).

Algumas partes importantes dos leis de mineração não pareceu conhecido por a liderança no Palmares II, incluindo quais companhias específicas têm autorização para fazer pesquisa, e também importante, quais tipos de compensação as companhias são obrigado dar pelos superficeiros. Porem a liderança sabe que falta algumas informações. Esta percepção está motivando ações de MAM.

Informação é distribuido desigualmente dentro da comunidade- aquelas na liderança têm muito mais conhecimento sobre direitos do que as agricultores pequenas na roxa. Entretanto, companhias de mineração como Vale estão negociando diretamente com estes pessoas mal informado, usando esta falta de informação.

A presença da informação incompleta, e a percepção que esta informação está incompleta, está motivando uma resposta da comunidade. No mesmo tempo, porem, as faltas neste conhecimento estão sendo explorado pelas companhias na área para avancar seus planos.
próprios. O MAM está focando agora de ficar uma voz political forte nacional, mas para realizar os seus objectivos, deva conectar mais com as comunidades rural.

Acknowledgements

I would like to thank my advisor, Gustavo Negreiros, for guiding me to turn vague frustration and outrage towards corporate power structures into a coherent project; and for constantly pushing us this semester, inside of lectures and out, to challenge our assumptions, and to see further.

This project would not have been possible to execute without the tireless and positive support of the community of Palmares II, my MST homestay family, and in particular Erielma and Adela. Thank you all for being an endless source of information, transportation, advice, laughter, earnest hospitality, and overwhelming kindness to a stranger far from home.

My thanks as well goes to the lawyers and técnicos with whom I spoke, who took time from their busy schedules and patiently, cheerfully, worked through my mediocre Portuguese to answer my questions, sometimes two or three times for clarity.

Finally, my earnest gratitude goes to the staff and community at World Learning Brazil, particularly Priscilla, Gabriella, Gabí, Renata, and Mariza, for tireless logistical and academic support both directly and behind the scenes; and to the staff and students, for genuine friendship through the ups and downs of an incredible adventure. In September I read another ISP that thanked the students, and thought it was really corny. Now, I get it—keep rocking it, guys, wherever you go.

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Introduction and broad overview of regional dynamics

The story of human interactions in Amazonia since the arrival of the Portuguese in 1508 is centered strongly around resource extraction. This dynamic is perhaps inevitable in light of the enormous wealth of the area in terms of a varied list of assets, from the rubber trees which fed the industrial revolutions of Europe, to plentiful waterways yielding opportunities for hydroelectric projects, to the rich biodiversity of the forest systems which produce unique medical and cosmetic compounds. At the same time, as a result of the confluence and overprinting of a number of special processes in the region throughout its geologic history, much of the land is a plentiful source of mineral ores, including some of the world’s largest iron and aluminum deposits\textsuperscript{15}. This parallel abundance of resources both on the surface and within the subsurface of the land is a source of conflict, as interest in using or preserving the former may be directly at odds with interest in extracting from the latter.

The expansion of the mining industry in the Amazonian state of Pará hangs as a backdrop to the dramas of agrarian reform, conservation efforts, and other industrial developments in the region. All minerals in Brazil belong exclusively to the national government, whose right to extract these resources usually supersedes that of the surface users, whatever their claim to the land\textsuperscript{10}. This yields an interesting dynamic throughout the region for the rural inhabitants - the plans of those living on the surface, whether they be landless farmers occupying properties of tenuous legal standing to gain possessorship, conservation units blending agricultural techniques with sustainable ecological principles, or traditional groups interested in preserving their historic ways of life, may be complicated by the discovery of mineral wealth beneath their feet.

In the face of this possibility, a community’s knowledge of their status and rights as surface occupiers of mineral deposits may be critical to any effort to resist marginalization. Perhaps due in part to the lack of consistently reliable communication infrastructure in much of the rural regions and the often high cost of travel, but due also partially to a failure on the part of the involved companies and government organs to actively provide relevant information\textsuperscript{7}, local communities often are not informed fully of the scope or implications of projects that are being discussed to be executed on their land. While most information regarding geologic interests and requests for research is public, for example, the reality of living in a community where cloudy days may eliminate internet access and cell signal is that there are practical barriers to accessing some types of media. The lack of knowledge stemming from this circumstance may include a
lack of understanding as to what exactly their rights are in the face of external demands for use of their properties or traditional homes. To some extent, knowledge is power- a group cannot react to a threat it is not aware of, nor can it demand that proper procedures be enforced without knowing what those processes are, or what is being done instead. It therefore seems likely that this gap in knowledge may undermine a community’s ability to respond to such demands to attempt to ensure that these rights, in the form of obligatory actions on the part of the State and the involved companies to compensate them for damages, are fulfilled. Partial or inaccurate knowledge, however, may complicate this dynamic, particularly in situations where companies in the area are actively building relationships with local communities and perhaps using the state of those groups’ knowledge as they further their own ends.

The MST settlement Palmares II near Parauapebas is in a position that typifies this kind of conflict. Palmares II is a 17-year-old settlement and something of a model of success for the MST’s mode of agrarian land reform. Palmares II is also in very close proximity to an extremely geologically rich area, the Carajás mining complex. A number of companies have already requested, and in some cases been granted, permission to conduct research into the mineral resources of the land within the borders of the settlement. Having interacted with the multinational mining company Vale since the settlement’s founding because of its location, which straddles the Carajás Railroad, the settlement is involved in the newly-forming Movimento dos Atingidos pelo Mineração (MAM), which hopes to become a national voice of groups affected by mining. The community has some knowledge of the rights of those impacted by mines, is aware that Vale may be interested in exploring for minerals on their land, and is organizing in response to mining threats. However, some important points of the laws surrounding mining, as well as a specific understanding of where Vale or other companies do or do not have permission to operate, for example, are not clearly held by the community leadership.

The intent of this study, then, is to examine the role that information plays in this community’s ability to prepare for the possibility of mineral extraction on their land. A series of interviews was conducted with community members, formal and informal leaders, and some of those involved with the efforts to organize MAM. The accuracy and completeness of their understanding of the legal process of opening a mine, as well as the responsibilities of companies doing so towards the affected communities, was assessed in comparison to an understanding of the process gained from documents such as the Brazilian Mining Code and interviews with
técnicos of the State Public Ministry. Additionally, knowledge of the geologic interests and companies operating in the area was assessed amongst interviewees in comparison to the publicly available data from the Departamento Nacional de Produção Mineral (DNPM- National Department of Mineral Production) whose online SIGMINE database maps and documents all areas of requests and grants of authorization to research and extract minerals. Finally, an attempt was made to understand whether and how the community perceives a disparity between their knowledge and the legal realities, how this perception may be motivating action, and how the other actors in the region (namely, the mining companies) may be using the state of information to further their own goals.

2. Palmares II- history and geologic setting
(See Appendix A for maps of Palmares and mineral processes in the area)

Palmares II is a community in close proximity to the Carajás mine, one of the most mineral-rich areas on the planet\(^1\). The Carajás fault complex is situated at the collisional juncture of two ancient microcontinents called cratons, which because of the chemical differences in the earth’s crust and atmosphere during the Archaean age are typically globally important sources of gold, copper, diamonds, Rare Earth Elements (REEs) and other precious ores, with an estimated 50% of all currently mined gold originating in these types of terrains.\(^1\) The Carajás region, however, is known for its iron, supplying in 2007 nearly 300 million tons to the global market.\(^1\) This iron is sourced from a type of ancient shallow sea deposit, called “Banded Iron Formation” (BIF) for its bands of color variation. All examples of this type of formation, worldwide, formed in the range of 2.7-2.5 billion years ago, as early photosynthetic organisms began to produce oxygen in significant quantities for the first time in the earth’s history.\(^1\) These BIFs are the result of this oxygen reacting with iron dissolved in seawater and precipitating out on some kind of seasonal or periodic cycle (thus, creating the visually distinct bands perpendicular to the direction of deposition as the chemistry of depositing sediments varied over time.) In the case of Carajás, an extensive BIF was caught between the two colliding cratons and pushed up between the two terrains, creating a series of iron-rich hills trending roughly east to West.\(^1\)

On top of this base, extensive volcanic activity in the distant past and during more (geologically) recent times has further enriched the area in gold, copper and REE ores.\(^1,1\) Groundwater absorbing the heat from cooling magma at shallow depths beneath the surface tends
to leach these elements out of the magma and deposit them in fractures through which these hydrothermal fluids are circulating.\textsuperscript{12} Essentially, several geologic conditions which all individually would have yielded economically interesting deposits have been tectonically pushed together into the same area, and subsequently overprinted by processes that have only enriched their potential mineral yield, either by emplacing new deposits or by lowering the concentration of unimportant material.\textsuperscript{12}

During the military dictatorship period, the value of this region was recognized. This lead to the development of the Great Carajás Project: the building of the mine and the industrial infrastructure to support it. This includes the Carajás Railroad, which runs from the mine near Parauapebas to São Luis in Maranhão, and the dam at Tucuruí, which provided energy to the mining operations.\textsuperscript{13}

\textit{History of the community and context of interactions with Vale}

Palmares II is a settlement of the Movimento Sem Terra, the Landless Worker’s Movement which is one of many groups operating in the South of Pará and elsewhere to advance an agenda of agrarian reform. These \textit{assentamentos} are typically formed on large underutilized farm resources with questionable legal ownership status by simply entering and occupying the land, hopefully without resistance, until such time as a claim to possessorship can be made to the federal government\textsuperscript{1}.\textsuperscript{2} The basis for this type of action is a provision within the Brazilian constitution that land must be put towards the greater social good, potentially allowing competing claims if it can be shown that the nominal owner is either not using the land productively or did not come into possession of the land by legal means.\textsuperscript{2} Palmares II just celebrated its 17\textsuperscript{th} year, and is something of a model in the region with respect to its educational programs and successful involvement in the agrarian reform movement. Nonetheless, it has its problems, including health and transportation infrastructure and a generational gap in commitment to the struggle to maintain the settlement.\textsuperscript{1}

The land that Palmares II is built on was originally part of a large fazenda called Rio Branco, which was already cut by the Carajás Railroad.\textsuperscript{2} As the assentamento grew, it eventually spread to the other side of the railroad tracks, which now cuts through the center of the plot of land (see Figure 1). Several of the people who were interviewed referred to Vale as a historic enemy of the settlement- one man interviewed reported that this is because the group that settled Palmares
originally tried to settle on a fazenda called Citron Verde, in the midst of land controlled by Vale. Vale purportedly called the police, and the settlers were removed from the land. In addition to this rough beginning to the relationship, the community has been in conflict with Vale because of the railroad for years. Currently there is conflict related specifically to damage caused by the railroad tracks to a water reservoir somewhere in the community, as well as past conflicts over the construction and location of a tunnel beneath the tracks to allow safe passage to the other side following a number of deaths on the tracks. In light of this history, many members of the community have a resoundingly negative image of the company. Relations hit a low in 2007 when a group of 5,000 from Palmares and other nearby communities camped out along the railroad and blocked it successfully for a two-or-three day period. Vale at this point cut off communications with the community, saying that it “refused to negotiate with terrorists”.

On the other hand, members reported that Vale’s interactions with the community have changed tone over the course of the years. In addition to conflicts created by a push to build a second rail line through the settlement, the community reported that the company has been conducting research on the land of individual farmers in the areas surrounding Palmares II, some of which has resulted in buy-outs of land near the assentamento. Vale is now strongly present within the community, promising projects to improve various aspects of infrastructure and fill social needs. Vale is currently paving roads in the city nucleus, for example, though some community members are skeptical about the speed at which this is occurring compared to when it was promised. Some feel that they are being given only trivial aids such as “a handful of computers for the school”, while bigger issues of health and education go unaddressed. Some families, however, do feel that Vale is genuinely benefitting the settlement.

Several leaders also reported what they feel are deliberate tactics on Vale’s part to create divisions within the community, as well as instances of espionage by people embedded within the settlement. Interviewees reported that Vale has been talking to individual farmers to get permission to do research on their land, rather than speaking to the community as an organized whole. They also reported Vale approaching individual groups within Palmares, such as the Youth Association or the Women’s group, and offering projects to benefit them alone. Community leaders see this as a covertly predatory tactic meant to buy support and sow dissent between demographic sections of the community.
Movimento dos Atingidos pelo Mineração

The Movimento dos Atingidos pelo Mineração has been working for the last few years with MST and Movimento dos Atingidos por Barragens (movement of those impacted by dams) to structure and organize their cause\(^5\). At the time of the visit to the community to collect data, the group was for an upcoming meeting to organize between 40 municipalities on a national level.\(^2\)

Some important goals of MAM is to acquire legal experts—either in the form of recruiting lawyers to their cause, or by encouraging members or associated youth to formally study law—and to build a political voice for the small landowners and other groups that typically feel marginalized by mining projects.\(^2,5\) The thought of the group is that if the media can be made to show what is happening (or preparing to happen) to communities near mineral deposits, society in general will support their cause and force change.\(^5\)

Those community leaders outside of MAM, however, referred to MAM as an urban movement, without relevance to the rural farmers in the area.\(^3,4\) This was perceived as a problem, as companies such as Vale have been interacting directly with rural landowners precisely to avoid dealing with an organized front such as MAM.\(^2\)

Role of information- formal framing of problem

Methodology

In order to understand the role that knowledge of specific geologic interests and rights is playing within the community, it was first necessary to attempt to gauge the accuracy and completeness of the knowledge the community holds. This was done through a series of unstructured interviews with people identified from within the community as knowledgeable of the subject, usually either members of the community’s resident association or organizers of MAM.

The knowledge of the legal system provided by these interviews was compared to knowledge of the legal system gained from reading publicly accessible information on mining law and from discussions with a state public prosecutor and employees of the Ministério Público specialized in mining issues.

The accuracy of knowledge of specific geologic interests in the area was assessed in comparison to data from the DNPM SIGMINE database showing the areas in and around
Palmares, almost every part of which is covered by either a research authorization or a pending authorization request by a variety of companies interested in a variety of ores and materials. The SIGMINE database is updated daily and is generally accurate within 24 hours of a change in status. This database displays all “mineral processes” (areas related to mining interests, ranging from research requests to active mines) anywhere in Brazil, and provides a description of each in terms of what company has requested it, what ore is being sought, and what stage the process is in. A number of additional displays, such as the boundaries of conservation units and assentamentos, may be displayed to overlap. The Palmares assentamento was identified, and all mineral processes overlapping this area were catalogued (Table 2).

Concurrent with this assessment of the state of both types knowledge was an attempt to understand how the information is affecting the ability of the community to respond: how the same community leaders perceive this state; whether or not that perception of (potentially) a lack of information is motivating or preventing action; finally, whether that lack is being used by the other actors in the region, namely the mining companies interested in the last. These topics were explored through questions asked during the same unstructured interviews (documentation of which is found in Appendix B).

3. Major discrepancies between community perception and public laws/information

The main sources of legislation directly regulating mining stem from within the Brazilian constitution and the Mining Code of 1967. Updates have been periodically made to these documents since their adoption. At the same time, the environmental licensing process required of large scale industrial projects in Brazil plays an important role in the relationship between companies and potentially impacted communities. The basic stages and requirements of each type license required in the process of research and extracting minerals is presented in Table 1.

Ownership of Mineral Rights and permission to perform research

All minerals in Brazil are the property of the Federal Government. This includes all exposed outcrops and subsurface deposits extractable for industrial or commercial use, including petroleum, phosphates mined for fertilizer, sand mined for construction use, and mineral ores such as iron, copper, and gold. These rights may be awarded to a mining company through a two-step licensing process that separates permission to conduct geologic research from permission to
Table 1: Phases of Mineral Research and Exploration Licensing

<table>
<thead>
<tr>
<th>Kind</th>
<th>License Phase</th>
<th>Issuing Agency</th>
<th>Duration</th>
<th>Requirements</th>
<th>Public Participation in Decision making</th>
<th>Source Laws</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Research Authorization</td>
<td>DNPM</td>
<td>3 years, with options to renew</td>
<td>Produce report on extractable minerals found for DNPM; annual per-hectare exploration fee</td>
<td>No permission needed from landowners</td>
<td>Mining Code</td>
</tr>
<tr>
<td>Geologic Licensing</td>
<td>Mining Concession (only for areas already granted research authorization, with complete reports, extraction plan, and demonstration of financial capability)</td>
<td>MME</td>
<td>Exhaustion of deposit</td>
<td>Environmental license required. Start operations within 180 days of grant, pending other licenses; do not cease operations for more than a 6 month period without MME approval; pay CFEM and royalty to landowner; compensation for occupation of land</td>
<td>No permission needed from landowners</td>
<td>Mining Code</td>
</tr>
<tr>
<td>Environmental Licensing</td>
<td>Preliminary license (LP)</td>
<td>IBAMA or SEMA</td>
<td>Up to 5 years</td>
<td>Environmental Impact Assessment prior to granting of PL</td>
<td>Hearings must be held if requested by public prosecutor or a group of 50+ citizens. RIMA must be produced and distributed to public offices.</td>
<td>various CONAMA resolutions, state-specific supplementary laws</td>
</tr>
<tr>
<td></td>
<td>Installation license (LI)</td>
<td>IBAMA or SEMA</td>
<td>Annually renewed (state limit)-up to 6 years</td>
<td>Must meet legal and environmental standards based on LP recommendations to be renewed</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Operational license (LO)</td>
<td>IBAMA or SEMA</td>
<td>4-10 years, renewable</td>
<td>Must meet legal and environmental standards based on LI recommendations to be renewed</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 1. Summary of stages of licensing required to conduct research and extract minerals.

implement an extraction project in a specific area of land. The DNPM may grant a company permission to explore a parcel of land for a certain mineral commodity for a 3 year period, renewable at least once. At the end of this phase, the company must produce a report outlining their findings, including any other minerals discovered and the feasibility of extraction.

Following this, the same company may be awarded a mining concession from the Ministério de Mineração e Energia (MME). This is dependent upon the receipt of environmental licensing, and is valid until the deposit is exhausted.
All members of the interviewed group knew that subsoil mineral rights were nationalized. Some confusion arose, however, in terms of whether (or rather, from whom) a company needed permission to conduct research. While the majority of interviewees recognized that federal permission is required, most also believed that specific permission from the landowner is required, and some believed companies are required to compensate landowners for conducting research on their land. In fact, one MAM organizer said that MAM was actively trying to hold conversations to make rural farmers aware of this requirement.

It is important to note that because of the national ownership of mineral wealth, mining extraction is seen as a matter of national patrimony. It is part of the Mining Code that once a license to extract is granted, this must commence within 180 days, and may not stop for more than 6 months without the permission of the MME. In the decades following the military dictatorship, various administrations have oriented Brazil’s economy towards primary resource exportation in an attempt to pay off the debts incurred by the military regime. Thus, many laws and tax structures (royalties paid for extraction, exceptions to exportation taxes for minerals, etc.) reflect the strong interest of the federal government in seeing discovered deposits exploited. Once the second phase of geologic licensing is granted, it is unlawful for companies not to continue to exploit the deposit in question.

Environmental Licensing

The right to extract minerals may only be granted following the receipt of an environmental license to the project. However, practically speaking, most large projects are already fully planned and preparing for implementation by the time such requests for licensing are made. Projects may be approved as-is or approved on the condition that certain changes are made or actions are taken, but they are rarely refused all together. This is likely due to the previously mentioned national focus on mineral extraction.

Environmental licensing usually falls under the jurisdiction of either the Federal or a state government, depending on the scale and location of the project. If a project may have a significant environmental impact in two or more states, IBAMA (the Brazilian Institute of Environment and Natural Resources) is the responsible licensing body, though IBAMA may also choose to delegate this responsibility to a specific state in some circumstances. In cases of only a single-state impact being anticipated, the process falls to the relevant state-level department-
the case of Pará, this is the SEMA, formerly SECTAM. The state may also delegate to a specific municipality, but this is rarely done, as most municipalities do not have the necessary technical capacity to meet required legal standards. Small scale projects with limited areas of impact may fall to individual municipalities.  

Licensing occurs in 3 stages. A preliminary license (LP) of basic project approval is followed by a second approval to begin construction or installation of the project (LI), then by a third level of permission to operate (LO). In order to receive a license, a project must conduct an Environmental Impact Assessment (EIA), a series of studies characterizing the region to be directly or indirectly affected by the actions in the area, if those impacts are deemed to be "significant". As of 1986, EIA studies must characterize impacts in terms of physical, biological, and social effects on the region. The studies must also characterize affected populations and list negative and positive impacts on communities in the area.

An additional report of the findings of these studies, called the RIMA, must be prepared in accessible language. The RIMA must be made publicly available at a variety of municipal, state, and federal offices, as well as at the offices of other government organs such as ICMBio. If the licensing agency deems it necessary, companies are required to hold a public hearing to discuss the potential impacts to the region and community and to allow the communities in question to voice concerns that should be taken into consideration as the studies are completed. A public hearing may also be requested by the Public Prosecutor’s Office, an NGO, or a group of 50 or more citizens. Should such a meeting be requested within the proper time frame, and should it not be held, any license granted is technically invalid.

After a review of the positive and negative impacts of the project, the environmental license may be approved, denied, or approved tentatively with conditions that must be fulfilled. As stated previously, these licenses are almost never flat-out denied- instead, recommendations are made regarding how to mitigate or minimize damages they may cause. However, these conditions are not always followed through with by companies. Ultimately, this is the source of much of the conflict between landowners and industrial projects- whether and to what extent the obligations stemming from the environmental impact studies are fulfilled, as these may range from efforts to conserve the physical environmental factors near a community to the implementation of social and infrastructure projects within nearby cities. These recommendations are therefore not a consistent list of requirements, adding to the confusion amongst affected groups as to what
exactly the obligations given to the companies are— they may be different in every circumstance. They also may not be comprehensively representative of a community’s actual needs, depending on the degree to which community input was actually taken into consideration in the development of the RIMA.

**Potential Recourse for Communities**

If the conditions of the environmental licensing process are not being followed, the theoretical government organ of recourse for the affected groups is the organization responsible for issuing the license— normally either IBAMA or the responsible state agency. If other parts of the mining regulations are not being followed, for example if unauthorized research is being conducted, the organization responsible for allocating those licenses is the theoretical recourse. Unfortunately, these organizations in general don’t have the technical capacity or organizations structure to deal with individuals affected by large projects. To have any realistic chance of being heard, communities have to organize and find a lawyer to help them fight a collective legal battle to demand that the laws are followed. The Ministério Público is a resource in these cases, to ensure that procedures are being implemented.

The community leaders interviewed were asked what government body would be a potential recourse, should the conditions of the environmental license not be fulfilled by a company. Most responded that IBAMA was the theoretical resource, though all expressed doubt that going to any government organization would actually produce results— some believe that such organizations are not capable of helping due to lack of infrastructure to do so, while others believed the organizations are not interested in helping because of the conflict of interests with the federal government’s desire to see the mining operation continue unimpeded.

**Mining concession, and compensation for landowners**

Extraction of minerals can only begin with a formal concession of mining rights to a company within a set parcel of land already granted exploration licensing. For this right, a company must pay an annual royalty to the federal government, in addition to any state and local taxes required of the project’s profits. This royalty is between .5 and 3% of net annual profits, depending on the substance being mined. Landowners, as well, are entitled to a royalty payment,
equivalent to half of that received by the federal government for the operation (thus, between .25 and 1.5%).

Because of the tangled history of interactions between the community and Vale due to the railroad’s presence within the assentamento, it was hard to separate questions of Vale’s responsibility to the region currently from discussion of any company’s potential responsibility in the specific hypothetical instance of research and mining, as people were inclined to return to talking about the issues directly affecting them in the present. Nonetheless, everyone interviewed believed that companies operating large industrial projects, including mines, are required to implement social or infrastructure projects to benefit the communities in the region. One MAM member believed that if a company were to open a mine in an area that would cause a community to be unable to stay on the land, they would technically be required to provide that community with another location to live, with an equal or improved level infrastructure.

The talk with the técnicos at the MPE indicated that beyond any social project recommendations of the environmental licensing process, companies are not specifically legally required to do anything for communities in affected areas. When asked specifically about the requirement to share profits with landowners, they emphasized the practical reality that this almost never occurs. To ease interactions and for PR purposes, they often do execute such projects as a means of negotiating with local people; the MPE employees believe this is a means of distracting the population with instant gratification prior to purchasing their land for far beneath its real value with respect to the minerals present.

Importantly, the awareness of the legal obligation to share a fraction of net profits with the surface owner was not seemingly present in the community. When asked specifically about the obligations of companies towards those whose land they intend to mine, the royalty payment was never mentioned. It was suggested by the MPE that such profit sharing almost never happens in terms of the practical reality—companies such as Vale buy the land they intend to mine prior to beginning operations for exactly that reason.

The sole exception to this rule of thumb may be the case of ALCOA’s interactions with the ribeirinho groups surrounding Lake Juruti Grande in western Pará, where the association representing the nearby communities successfully negotiated significant concessions on the part of the mining company to the community in terms of profit sharing, compensation for damages to the land, and social/infrastructure projects. This case is so new that it is not yet fully understood
by the MPE employees, who believe the success of the groups in this region was dependent upon their status as *povos tradicionais*, traditional peoples. However, the public prosecutor who worked on the case believes that the success of this set of negotiations is simply a matter of organizing to demand that human rights be observed- he cited the Geneva Convention as an important source of the legal authority backing the community’s position, for example, and referenced no distinction when discussing the rights of non-traditional groups such as the farmers in Palmares II. It may be that this case will set the stage for other communities to make similar stands, if pressure and momentum can be created both to codify this new mode of interaction into law and to enforce any such rules that may be created.

4. Major Discrepancies in community knowledge and specific regional geologic interests

Specific geologic interests in the area and community awareness

Table 2 presents a complete list (as of December 5, 2011) of the mineral processes partially or entirely within the legal boundaries of Palmares, as shown by the DNPM database.

As a whole, the community of Palmares II is not uniformly aware of the possibility of mineral interest in the land, though those in leadership positions clearly are. Based on the assessments of several of the interviewed leaders, as well as observations and informal conversations with various Palmares residents throughout the research process, the community is aware of Vale’s presence in the region at least in the context of the existence of the railroad within the boundaries of the assentamento. While Palmares is close enough to the Carajás mine that many residents or friends of residents are employed there, however, several acquaintances expressed doubt that mining is something that could happen “*aquí*”, inside of Palmares.

Those involved in the effort to organize MAM and in the resident association were aware of Vale’s interest in the land potentially for minerals such as gold, copper, and manganese. Several interviewees referenced watching aerial geologic surveys of the region that were assumed to be Vale collecting regional data. They also referenced other small companies operating in the area mining construction materials such as sand and gravel on Vale’s behalf, in preparation for the construction of the planned second railroad line. No one specifically mentioned by name other companies in the area. According to the DNPM, there are currently *** other companies other than Vale with mining processes inside the settlement, 3 of which have currently, and 2 of which have had in the past, research authorization.
Table 2: List of Mineral Interests within borders of Palmares II

<table>
<thead>
<tr>
<th>Title name</th>
<th>date</th>
<th>Number</th>
<th>Phase</th>
<th>mineral</th>
<th>approx location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vale S A</td>
<td>2005</td>
<td>851003/2005</td>
<td>available</td>
<td>nickel</td>
<td>Tiny strip in Eastern Palmares</td>
</tr>
<tr>
<td>Valeria D. Lourinho Nascimento</td>
<td>2011</td>
<td>850985/2011</td>
<td>available</td>
<td>gold (M)</td>
<td>Southwest Palmares, strip crossing Railroad</td>
</tr>
<tr>
<td>Monte Granito Mineração e Comércio Ltda</td>
<td>2011</td>
<td>850892/2011</td>
<td>licensing</td>
<td>gneiss</td>
<td>Southwest Palmares, north of Railroad</td>
</tr>
<tr>
<td>Aura Gold Mineração Ltda</td>
<td>2003</td>
<td>850254/2003</td>
<td>research authorized</td>
<td>gold</td>
<td>Western Palmares</td>
</tr>
<tr>
<td>Mineração Iraja S A</td>
<td>2003</td>
<td>850253/2003</td>
<td>research authorized</td>
<td>gold (M)</td>
<td>Northwest periphery</td>
</tr>
<tr>
<td>Vale S A</td>
<td>1994</td>
<td>855028/1994</td>
<td>research authorized</td>
<td>gold</td>
<td>Eastern Palmares</td>
</tr>
<tr>
<td>Vale S A</td>
<td>1996</td>
<td>859915/1996</td>
<td>research authorized</td>
<td>diamond (ind.)</td>
<td>Southwest Palmares</td>
</tr>
<tr>
<td>Xstrata Brasil Exploração Mineral Ltda</td>
<td>1996</td>
<td>854245/1996</td>
<td>research authorized</td>
<td>gold (M)</td>
<td>Northeast periphery</td>
</tr>
<tr>
<td>Xstrata Brasil Exploração Mineral Ltda</td>
<td>2001</td>
<td>850049/2001</td>
<td>research authorized</td>
<td>gold (M)</td>
<td>Southwest Palmares</td>
</tr>
<tr>
<td>Xstrata Brasil Exploração Mineral Ltda</td>
<td>1996</td>
<td>850630/1996</td>
<td>research authorized</td>
<td>copper</td>
<td>Western Palmares</td>
</tr>
<tr>
<td>Araçatuba Participações Societárias e Mineração Ltda</td>
<td>2009</td>
<td>850743/2009</td>
<td>research requested</td>
<td>gold (M)</td>
<td>Central Palmares, east-west strip</td>
</tr>
<tr>
<td>José Ribamar Gomes Abrantes</td>
<td>2007</td>
<td>850878/2007</td>
<td>research requested</td>
<td>gold (M)</td>
<td>Northeast periphery</td>
</tr>
<tr>
<td>Mauro Tailor Gerhardt</td>
<td>1995</td>
<td>850321/1995</td>
<td>research requested</td>
<td>gold</td>
<td>Eastern Palmares</td>
</tr>
<tr>
<td>Terrativa Minerais S A</td>
<td>2011</td>
<td>851514/2011</td>
<td>research requested</td>
<td>copper</td>
<td>South/Central/Eastern Palmares</td>
</tr>
<tr>
<td>Vale S A</td>
<td>2005</td>
<td>851002/2005</td>
<td>research requested</td>
<td>nickel</td>
<td>Three thin transects through north and west of Palmares</td>
</tr>
<tr>
<td>Vale S A</td>
<td>2011</td>
<td>850741/2011</td>
<td>research requested</td>
<td>copper</td>
<td>Northeast periphery</td>
</tr>
<tr>
<td>Vale S A</td>
<td>2008</td>
<td>850827/2008</td>
<td>research requested</td>
<td>copper</td>
<td>rough L-shape with junction at Railroad, South and Eastern Palmares</td>
</tr>
<tr>
<td>Vale S A</td>
<td>2008</td>
<td>851232/2008</td>
<td>research requested</td>
<td>manganese</td>
<td>quadrangle in West Central Palmares-divided by railroad</td>
</tr>
</tbody>
</table>

Table 2: List of mineral processes present in territory of Palmares II as of December 5, 2011.

Subsoil Permissions of Vale

One common misconception held by the majority of interviewees is that Vale already has official permission to do research, or in some cases extract, anywhere in the Palmares settlement region. According to the DNPM SIGMINE database, Vale is authorized to do research in only two areas- one in the Eastern edge of Palmares (gold), and one area in the southwest quadrant (industrial diamond). Another small strip of land in the East was at one point authorized for nickel research by Vale, but its current legal status as “Available” may indicate that it is no longer of active connection to the company. Vale has pending requests on 4 other areas in the
community’s land, two of which are for copper and the other two of which are for nickel and manganese exploration, respectively.

While interviewees stated when asked that Vale actively perpetuates the belief that they have subsoil rights to the entire area,\textsuperscript{1,5} it was unclear how, specifically, this is done - whether such statements were directly made in public spaces like the meetings held between the community and the company, for example, or perhaps only misinterpreted as such information moved through the community from individuals interacting with Vale representatives.

Some of those interviewed believed that Vale had already secured rights through the required legal process; others believed that Vale already has the rights to extract minerals from anywhere in Brazil because of its former status as a national company. Finally, one association member was not sure where Vale technically was allowed to be, but was believed this to be irrelevant, as in his view, if Vale were ever caught researching somewhere with no license, they would nonetheless be able to wield political influence and use the judicial system to retroactively acquire permission.

Role of information

Awareness of gaps, and role in motivating of response

The leadership interviewed is very aware that their knowledge of the legal system may be incomplete or inaccurate. This awareness is motivating action on their part - one of the current goals of MAM is to acquire lawyers or legal expert to support their organization as it forms, and despite being able to converse about the legal mining process and obligations of involved companies, nearly all interviewees cited specific information about their rights as being something they felt the community was lacking.

Additionally, the distribution of what information is present is reported to be extremely uneven. MAM organizers claim that small agriculturalists in the area do not have any significant knowledge of the process required of companies, or knowledge that they have rights in the face of these interests. MAM has been attempting to meet with farmers to discuss with them the idea that landowners must be compensated by groups conducting research on their land, and that they must have authorization to do so. However, he also reported that these farmers often do not believe what MAM has to say because they cannot read any official documentation of it, and cited the need to combat illiteracy as part of their strategy to organize against mining threats.
Use of knowledge by companies in the area

Those interviewed reported a trend of companies (specifically, Vale) attempting to negotiate with individuals in the community and not with the group as an organized whole. Leaders see this as a means of exploiting those individuals, namely rural landowners, who likely do not have much information about either the legal requirements of federal authorization for the company’s actions or the potential value of the minerals they are seeking. Several people reported that some small landowners in the surrounding region outside of Palmares II have already been bought out; but while research is being conducted within the boundaries of the assentamento, so far no land seems to have been sold inside of it. It seems clear to the leadership that this is an exploitation of the distribution of knowledge within the community on the part of the company.

Vale’s actions in the region, whether implicitly or explicitly, spread the idea that they currently have the legal right to explore all land in the area. This is not the case, from the DNPM’s publicly available records. While some community leaders believe that the practical reality of the situation is that any research actions Vale takes without the required authorization would be retroactively granted permission through the judicial system should any complaints arise, the fact remains that the action itself is not legal. The question of enforcement is always complicated in this region, but demanding that the laws be observed is the only first step to moving towards realizing that mode of interaction.

Potential problems with the study

Law vs. Practical Reality

This sentiment that many legal rules are irrelevant in a practical sense, which was a recurring theme in these discussions, added an un-planned-for dimension of complexity to the attempt to qualify accuracy of community knowledge. It was not within the scope of this project to assess the frequency with which companies operating in the Amazon follow the letter of the law- though extensive anecdotal evidence and despondent commentary directly from employees of the Ministério Público Estadual suffice to show that enforcement of the law is a major problem in Brazil. Thus, it is difficult to confidently assess accuracy of knowledge of a system by
comparison to a documented legal reality when the functional reality may be quite different from what is written on paper.

It is clear that the leadership of Palmares believes that companies such as Vale have the ability to manipulate government structures to their own ends, and that the government organs in place to protect communities will not function without extensive action on the part of said communities. Both MAM organizers interviewed stressed the necessity of bringing media attention to the problems faced by communities affected by mining as a means of forcing broader social change, and that current legal structures were likely not sufficient to solve their problems, a position which was reiterated by the state técnicos.

**Issues with execution of study**

Several issues with the nature of this project, in terms of the structure of the ISP period and the content of the project itself, may have impacted the quality of this study.

Obtaining interviews with relevant parties in Palmares was complicated by scheduling issues, ranging from disparities between the weekly schedules of farmers and transportation sources to the travel schedules of many leaders involved strongly in the national levels of the MST. For example, at least one interviewee was in Palestine for half of the period during which information was being collected. Beyond this, communication was occasionally problematic due to the low availability of cell signal. While the sample of interviewees was necessarily selected from a limited group (those recommended by the community as sources of relevant knowledge and leadership), and therefore a small subset of the population, more time in the area (and therefore more opportunities to speak to different people) would of course paint a clearer picture of exactly what the community knows. It is also possible that the range of perspectives documented in interviews was biased by the entry-point into the community- the researcher’s hosts played a large part in suggesting people to speak with and establishing those contacts. It is always possible that the picture might look somewhat different had a different sample of the population participated in the study.

Additionally, the legal codes of Brazil are complex in a way that is often not reflected “on paper”. Some of the understanding of the relevant laws presented here is based on documents prepared by legal experts for American businessmen, for example- ideally, where money is concerned, corporations will invest in accuracy of translation and interpretation. However, the
fact remains, as evidenced by the need for years of schooling to enter the legal profession, that more time would be needed for a fully nuanced understanding of both the laws as they are written and the laws as they are practiced and enforced.

Finally, it must be noted that there is always a potential for misinterpretations or misunderstandings to have occurred on the part of the researcher, whose native language is not Portuguese. While effort was repeatedly made to verify certain important points by summarizing and repeating information back to interviewees for confirmation, a high possibility still remains that some aspects of interviewees’ responses were lost in translation.

**Ideal follow-ups**

One major regret of the researcher is that the opportunity to speak with landowners on whose land mineral research is currently being conducted did not materialize. Specific documentation of this type of conversation and relationship would shed serious light on the reality of Vale’s interactions directly with this population.

Another important question remaining is to characterize the relationship between the community and the other companies in the area, whom almost none of those interviewed seemed to know much about, including names or interests. More than half of the current and requested research claims in the assentamento belong to companies other than Vale, yet they are not strongly present in the awareness of the community leadership, other than the active gneiss mine. Some residents believe that other companies in the area are connected to Vale in some way. Understanding the role that these other smaller companies are playing would better illuminate the broader regional dynamics of company-community interactions, rather than simply the complex but highly visible relationship between the community and Vale.

**Summary of conclusions, and broader implications of the study**

Important points gained from study of legal system not universally recognized by community:

1. Companies must have authorization from the government to conduct research
2. Companies must share % of profits with landowners and compensate for use of land
3. Companies must hold public hearings if requested, or their Environmental License is invalid
Important points gained from SIGMINE not universally recognized by community:

1. Vale has some rights to explore in Palmares II but has not yet been approved in most of its areas of interest
2. A number of other small companies are interested in land inside Palmares; some have already been approved to conduct research; one is mining gneiss.

Conclusions regarding role of information in Palmares II:

1. The perception of a lack of information is motivating action on the part of the leadership, which trying to organize both to gain legal expertise at national level and to speak directly to small landowners locally who they believe do not know their rights.
2. The lack of information is being exploited by at least Vale, which is dealing with individuals rather than the community as a whole in these cases. Not much can be specifically said about the other companies in the region; Vale’s visibility in the community is much higher due to its history with the community and the conflicts surrounding the railroad.
3. Leadership has significantly more knowledge than landowners, but important interactions between the companies and the community is occurring through these small farmers- thus, increasing awareness of these issues amongst rural citizens is critical. MAM is aware of this structure of information and is trying to remedy it.
4. MAM is an important path towards building a political voice on a national scale for communities in the same position as Palmares, but it is thought of by non-MAM leaders within the community as a movement of urbanites and intellectuals- to succeed, it must become a rural movement as well, as key interactions with companies occur in rural areas.

The lawyer for the State Prosecutor’s Office involved in the legal struggle between ALCOA and the communities of Juruti put it this way: because of the national interests at play and federal possession of mineral rights, if there is a mineral deposit that the government wants to extract, there is little that can be done to stop the project from happening. The process, however, can be controlled, in theory, by the local community. If complete information on the rights of communities can be made accessible to the affected groups, they will be able to make decisions in
dealing with mining companies to maximize the potential benefits to their towns and groups. For example, groups that know that landowners are entitled to compensation and royalties for mining done on their land might chose not to sell their holdings when pressured by companies to do so— or at least, be able to negotiate a much higher price based on the knowledge of what they are giving up by selling before mining begins. Additionally, if communities are aware early in the process of what companies are interested in their land, they may be able to work to establish a dialogue with those groups sooner, increasing the chance that their voices will be taken into consideration in the environmental licensing process and impact studies. Finally, holding companies accountable for following legal procedures must be part of any movement towards change in the regional dynamic. Making these discrepancies officially known to the relevant agencies or the Ministério Público if companies are not following required elements of the law can only help build pressure for improvement in the status quo.
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Appendix A: Supplementary maps

Figure 1: SIGMINE Satellite image of Palmares II Assentamento, marked as red shaded area. Red lines are roadways- road to the south of Palmares terminates to the west at the Carajás Mine complex, inside the Carajás National Forest. The intersection of roads in the upper right hand corner is the city of Marabá.

Figure 2: The same image overlaid by mining processes in the area. Yellow areas are requests to conduct research; blue areas are research authorizations. Red spaces (other than the outline of Palmares II) are mining concessions. Beige/brown areas are “available”, meaning that research authorization was granted at one point but has not been maintained by the title company.
Figure 3: Close-up of Palmares II. The railroad can be seen as a straight line running roughly parallel to the river in the southwestern area of the settlement.

Figure 4: Palmares II overlaid by current mineral processes. See Table 2 for complete inventory of processes within the assentamento boundaries.
Appendix B: Interview Documentation

Interview 1: November 20, 2011, 12:30 PM, Palmares II city nucleus
Biographic details: Male, 23, studies in Marabá at UFPA for 3 months out of the year, resident since founding of Palmares. Involved in rural education initiatives. Female relative in house (who was out of town for the week) is involved with MAM.
Prior to start of interview, the nature of the SIT program and ISP was explained (household had also hosted another student during the second rural homestay). Subject was requested to discuss the history and relationship of the community to the mining companies in the area to provide context and serendipitous details for potential follow-up. This was followed by a conversation about the legal process of opening a mine, and the obligations of mining companies towards communities on the land of interest. Finally, questions about whether the subject felt information was missing from the community were introduced. Interview was largely unstructured, though a list of topics was present kept and cross referenced prior to the closing of the conversation to make sure that all relevant subjects had been discussed.
Notes taken on information discussed, following thread of conversation:

Palmares settlement grew around railroad, occupied fazenda yielded 3 settlements originally
Vale says it will implement projects in the community but it hasn’t really happened yet.
Vale is already doing research in the area; wants to negotiate with individuals
“Trying to make friends from old enemies”; perceived to have intentions for the land- community is nervous about this
Community are possessors of land, not owners (use concession).

Company’s (Vale) presence is dividing the community- fragmenting ability to mobilize
Some people in community work for Vale (at mine), this number is growing

Many people in the community believe that the possibility of mining on their land is a very distant possibility- interviewee believes it is nearer

Movimento dos Atingidos pelo Mineração:
To fight against impacts on community- people killed by train, noise, no electric power crossing tracks (is this true?); one of the water reservoirs was damaged somehow and has not yet been replaced
Community recently viewed film about another group that was forced to move by the construction of a hydroelectric dam- people are worried about the possibility.
History plays a role in identity- community has to remember where they have come from and what Vale represents to them or they will not understand the need to fight against influence.

Settlement is on valuable land- expect Vale to try to buy it
Vale wants youth to work for them/youth sees working for Vale as an option out of agriculture
But Vale offers no opportunity for youth to study and grow, destroys opportunity for social responsibility and leisure in life
Sicknesses due to mining-related contamination issues? Nobody has studied the water in the area to know
Life in Palmares allows people to produce things, including knowledge- value of settlement is related to things not easily quantified, like culture and shared history.

Legal understanding:
Groups doing research must have permission of landowners
Companies need permission from the government to extract, and the government has to talk to landowners
Must acquire environmental license; perform EIA – report over many areas of possible impacts
Have to give to communities:
- another place to live
- social/infrastructure projects

Is there information the community is lacking:
- who influences the system?
- what are our rights?
- what are companies allowed or not allowed to do? by what authority?

Where can this kind of info be found? with whom can communities speak if rights are not being fulfilled?
- Vale directly
- IBAMA and ICMBio – legal info and Env. License stuff
Interview 2: November 21, 2011, 11 AM, field home of interviewee outside of Palmares II city nucleus
Description of subject: MAM organizer, involved in upcoming state/national level organization efforts; male; late 40s.

Prior to start of interview, the nature of the SIT program and ISP was explained. Subject was requested to discuss the history and relationship of the community to the mining companies in the area to provide context and serendipitous details for potential follow-up. This was followed by a conversation about the legal process of opening a mine, and the obligations of mining companies towards communities on the land of interest. Finally, questions about whether the subject felt information was missing from the community were introduced. Interview was largely unstructured, though a list of topics was present kept and cross referenced prior to the closing of the conversation to make sure that all relevant subjects had been discussed.

Timeline of events:
1994- fazenda Citron Verde occupied- Vale calls police (In the previous interview, the subject referred to Vale as an “enemy of the community”- subject in this interview was asked to explain what was meant by that characterization, and explained that this was because of this first set of interactions during the attempted founding of the assentamento. Vale was thought to be interested in mineral wealth on the land the group was attempting to settle.)
1996- fazenda Rio Branco successfully occupied- cut already by Carajás railroad.
2007- protesting lack of social/infrastructure/health projects, 5000 people from Palmares and surrounding areas camp out along the railroad for 25 days, blocking it with sticks and rocks for 2-3 days. Happened again in 2008 for less time.Vale cuts off direct communications with community, “refusing to deal with terrorists”.
2010- restarted negotiations with community. Community is confused as to whether or not they should deal with Vale- on one hand, some people believe it won’t affect anything Vale chooses to do. On the other hand, some people believe Vale is going to act anyway, so they need to try to control that interaction.

Movimento dos Atingidos pelo Mineração:
Movement is going national. Meeting in Parauapebas in December of representatives from 40 municipalities to look at potential for trying to get laws changed to reflect needs and rights of those affected. Move will strengthen political voice, which is necessary to get a seat at the table. Group must negotiate directly with Vale. International attention to the problem is needed.

Legal information:
Companies need government authority to do research.
Need federal permission to extract and state permission to get an environmental license. Must produce RIMA and EIA with damage mitigation plan- but this is always approved, and the community has no opportunity to participate in the process.

A new social front is needed to force companies/government to take voices of affected communities into consideration.

Potential recourses (in theory) if procedures are not being followed: Ministério Público- but they don’t have technical capability or interest to fix situations- the company does what it wants and tries to convince the community that it will be good for them. No “real” recourse. Talk to Environmental agency/ministry if RIMA isn’t being followed. Same deal as above.
Association member (male, late 40s) was being interviewed by another researcher (former MST member now working towards a degree in São Paulo) who was trying to talk to a representative of community leadership regarding the impacts of mining on communities in Pará and Maranhão; I was invited to come along for the conversation. I returned the following morning with targeted questions more specifically related to this project.

Big projects are planned for the entire state of Pará, but little information is available to communities. Association in Palmares II is excluding many families- Vale is dividing the community. Some groups want to work with Vale, some don’t.

Construction material mining is occurring in Palmares.

Rio Parauapebas has no economic function due to high levels of pollution.
Is sand mining affecting the local aquifer?

Vale transfers blame for environmental degradation to assentamentos- eg. , eucalyptus farmers- but why are they farming eucalyptus if not Vale’s operations?

Açailândia- promised social projects before operations began, afterwards were told Vale had no responsibility.

MAM is an urban movement- but rural people are most affected.
Government will not help because it wants to increase resource extraction.
Espionage- people in community paid to spy on leaders or talk down prices, report to Vale.

Day 2:
Vale offers help to some groups within the community, but not others.
Meeting with the Youth, bought computers for school… bigger problems like health not addressed.
Meeting with individuals to negotiate value of land- not getting unified agreement from community.
RR tunnel is new- organized community action got it put in place that made sense, instead of where Vale wanted to put it.

Got Vale to asphalt roads, sort of.
MAM having difficulties with finances, finding lawyers, etc.

Vale is planning projects for the youth- sports, technical training, etc.
slowly moving through list of demands, maybe.

Vale already has rights to explore the subsurface.
Must pay owner of land for entrance, but some landowners don’t know this.
Vale will buy land where it wants to mine, and where new RR will be.
Must technically repair land after the project, but that doesn’t really work.
Other companies mining rock and sand for RR construction.
DNPM has already granted rights in some places- where?
Vale tells people the subsoil is already theirs.
Government won’t stop mining for the sake of Env. concerns- throw down some grass, call it a day.
Interview 4: November 23, 2011 – 8 PM – Palmares city nucleus, home of interviewee
Description: Member of Palmares II Resident Association, male, late 30s

Prior to start of interview, the nature of the SIT program and ISP was explained. Subject was requested to discuss the history and relationship of the community to the mining companies in the area to provide context and serendipitous details for potential follow-up. This was followed by a conversation about the legal process of opening a mine, and the obligations of mining companies towards communities on the land of interest. Finally, questions about whether the subject felt information was missing from the community were introduced. Interview was largely unstructured, though a list of topics was present kept and cross referenced prior to the closing of the conversation to make sure that all relevant subjects had been discussed.

Vale was privatized- against will of many people
talking to Vale now because of RR
Youth in area doesn’t have a future- stay as a farmer or work as a manual laborer for Vale
Can’t get education for children
Incredibly rich ground, none of the wealth stays in the communities nearby.

INCRA grants permission for research, but Vale will retroactively get it if it doesn’t already have it.
Environmental licensing from IBAMA
RR financed by World Bank- > requirements for social projects, which aren’t happening
Interview 5: November 24, 2011 – 9 AM – Palmares city nucleus, home of interviewee
Description: Member of MAM and MST, mid 20’s,

Prior to start of interview, the nature of the SIT program and ISP was explained. Subject was requested to discuss the history and relationship of the community to the mining companies in the area to provide context and serendipitous details for potential follow-up. This was followed by a conversation about the legal process of opening a mine, and the obligations of mining companies towards communities on the land of interest. Finally, questions about whether the subject felt information was missing from the community were introduced. Interview was largely unstructured, though a list of topics was present kept and cross referenced prior to the closing of the conversation to make sure that all relevant subjects had been discussed.

MAM- organization to represent those affected on a national scale
Vale is an enemy, here for iron
M. Atingidos p. Dams and MST are helping MAM figure out how to organize.
Vale already has subsoil rights.
Community is fighting for safe RR crossing, after many deaths
Vale has bought land around settlement, but not in Palmares
Spies speculate on land prices for RR
Fear of land buyouts

Incentives for youth to work for vale-
Vale has social obligations, not fulfilling them
Propaganda to move to mining areas, bringing all the problems of population growth
Small agriculturalists accused of destruction.

Vale already has research from aerial recon; now doing surface research
Landowners have a right to compensation for research but don’t know it
MAM is trying to spread this knowledge through conversations
70% illiteracy in the region- people don’t believe what MAM says
Trying to get people to get legal education
Society will defend the cause if the media would SHOW the problems
Radio has sympathy, personal conversation is the best method
Prior to start of interview, the nature of the SIT program and ISP was explained. Subject was requested to discuss the legal process of opening a mine, from initial research interests to extraction, in terms of the legal responsibilities of companies doing so.

Possessors and Owners of land have the same rights in a mining context- both inhabit the surface-superfícieiros

Must produce EIA/RIMA. RIMAS with only negative impacts don’t get approved. Companies must recuperate land after the operation

What can communities do:
ask for necessary documents
Make voice heard during RIMA process?
pressure the agency that authorized the operation or licensed
Can’t really stop these situations, but can make sure they are done right- can “control” the process.

Sources of rights:
Geneva Convention
Decreto Federal 6040- traditional peoples

Tucurui was an exception- problems relating to the military government
Prior to start of interview, the nature of the SIT program and ISP was explained. Subjects were requested to discuss the process of opening a mine, from initial research interests to extraction, in terms of the legal responsibilities of companies doing so.

2. Permission from government needed to do research, separate from permission to extract this is endlessly renewable, in practice no need to talk to landowners, but they do anyway for PR reasons
3. Negotiate with landowners before extraction to buy them out Juruti is an exception- traditional communities have different laws they are being given damages, not profits- environmental, cultural, etc.

some responsibilities are the company’s, some are the state’s

env.licensing rules changed after the Military Dictatorship ended- this is why Tucurui was such a mess?

Impacts of mining on several TI’s lead to high-profile cases of companies dealing with indigenous peoples to compensate; same happened when Eletronorte opened a dam in a TI Other groups believe now that companies have the same obligations towards them

EIA-
Characterize affected population and positive/negative impacts approve, reject, or approve with conditions- never rejected physical, biological, and social impacts (1986) may not address community’s actual needs, depending on how much their voices are taken into consideration in the impact assessment process

communities don’t receive information- no official notice until they have to leave

communities trade rights for instant gratification in the form of social projects

In a perfect world: recourse via licensing agencies if conditions are not followed In reality- get a collective cause lawyer, because organs don’t have structure to defend individuals and companies have huge political power